The aim of the study was to assess the cardiometabolic risk and body composition characteristics in women with rheumatoid arthritis (RA).
Methods. The study included 115 women aged 61.5Í}10.6 years with RA of 1-3 activity levels according to DAS 28. Cardiometabolic risk was assessed while taking into account the body mass index (BMI) and metabolically healthy phenotype (MHPO) or metabolically unhealthy phenotype (MUHPO) of obesity defined by a waist-to-hip ratio measurement (WHR), serum glucose and lipid levels. Body composition was determined by X-ray absorptiometry using fat-free mass index (FFMI), fat mass index (FMI), and abdominal-to-thigh fat ratio (A/G ratio).
Results. The majority of patients had a BMI≥25 kg/m2. 23.5 % of patients were overweight, while 42.6 % were obese with MUHPO being predominant in 66.7 % of them. With increasing BMI and WHR there was an increase in blood glucose (p=0.03), triglycerides (p=0.00), FMI (p=0.03), A/G ratio (p=0.00) and a decrease in HDL-C cholesterol (p=0.03). In addition, the higher levels of those parameters were predominantly associated with the MUHPO in both the normal BMI<25 kg/m2 and high BMI≥25 kg/m2 groups. Regardless of BMI, MUHPO was associated with a higher incidence of arterial hypertension (AH), carotid atherosclerosis (CAS), cardiovascular disease (CVD), and diabetes mellitus (DM). According to X-ray absorptiometry, the majority of patients, including women with BMI<25 kg/m2, had an increased amount of adipose tissue (>32 %) and abdominal obesity (A/G ratio>1). Sarcopenia (FFMI <6.0 kg/m2) was detected in 17 (14.8 %) and sarcopenic obesity in 5 (4.3 %) patients. Lower FFMI was associated with lower BMI, higher frequency of sarcopenia and higher VAS pain intensity.
Conclusion. Patients with RA tend to be overweight/obese with MUHPO and have high cardiometabolic risk for dyslipidemia, carbohydrate metabolic disorders, AH and AS, necessitating monitoring of WHR along with BMI. Body composition reflects increased adipose tissue in the majority patients, including the normally weighted ones. There is a trend toward the lower FFMI and the develop ment of sarcopenia/sarcopenic obesity with decreasing BMI, which is associated with greater pain intensity according to VAS.